# **Virginia Title V Operating Permit**

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-305 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	McQuay International, Inc.				
Facility Name:	McQuay International, Inc.				
Facility Location:	207 Laurel Hill Road Verona, Virginia				
Registration Number: Permit Number:	80906 VRO80906				
July 27, 2000					
Effective Date					
January 4, 2001					
Minor Permit Modification Date					
July 27, 2005					
Expiration Date					
•					
D. Bradley Chausing					
R. Bradley Chewning Director, Department of Environmental Quality					
,p					
January 4, 2001	January 4, 0004				
January 4, 2001 Signature Date					
Signature Date					

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#### 1. Facility Information

#### Permittee

McQuay International, Inc. P.O. Box 2510 Staunton, Virginia 24402-2510

# **Responsible Official**

Robert Puffenberger Central Services Manager

#### **Facility**

McQuay International, Inc. 207 Laurel Hill Road Verona, Virginia

## **Contact person**

Robert Puffenberger Central Services Manager 540-248-0711

AIRS Identification Number: 51-015-0087

Facility Description: SIC Code 3585 - Air-Conditioning and Warm Air Heating

Equipment and Industrial Refrigeration

Equipment

McQuay International, Inc. (McQuay) operates an industrial and commercial scale air conditioning equipment manufacturing facility in Verona, Virginia. The facility manufactures both centrifugal and reciprocating "water chillers" which are used to cool industrial and commercial buildings. The water chiller manufacturing process includes the following activities: metal fabrication, welding, brazing, parts cleaning, painting, testing, compressor repair and shipping. In addition to, and in support of the manufacturing process, McQuay operates the following equipment: boilers, fuel oil storage tanks, space heaters, refrigerant gas storage, pressurized gas storage, and cooling towers.

# 2. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burn	ing Equipm	ent					
01	92	Babcock & Wilcox Natural Gas Boiler Type FM (Constructed 1954)	21.0 mmBTU/hr	-		-	-
06A/B	91	Cleaver Brooks Natural Gas & Oil (Distillate and Residual) Boiler Model CB400-400 (Constructed 1984)	16.738 mmBTU/hr	-	_	-	03/01/99
07A/B	88	Cleaver Brooks Natural Gas & Oil (Distillate and Residual) Boiler Model CB400-200 (Constructed 1984)	8.339 mmBTU/hr	-	-	-	-
Coating E	quipment						
	-	P-16 Paint Line	30 gal/hr	-			
	113	P-16B Paint Booth	7.5 gal/hr	Overspray Filter	PCD05AB		
	114	P-16C Paint Booth	7.5 gal/hr	Overspray Filter	PCD05AC		
	111	P-16D Paint Booth	7.5 gal/hr	Water Curtain	PCD05AD	PM	11/29/99
05A						PM-10	11,23,00

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
	112	P-16E Paint Booth	7.5 gal/hr	Water Curtain	PCD05AE		
05B	168	P-16 Powder Paint Line	440 lbs/hr	Air Filtration System	PCD05B	PM PM-10	11/29/99
08	167	F-27OF Paint Booth	15 gal/hr	Overspray Filter	PCD08	PM PM-10	11/29/99
09	123	F-27 Paint Booth	30 gal/hr	Overspray Filter	PCD09	PM PM-10	11/29/99
10	29	P-31 Paint Booth	15 gal/hr	Overspray Filter	PCD10	PM PM-10	11/29/99
12	169	P-16B Powder Paint Booth	26.4 lbs/hr	Overspray Filter	PCD12	PM PM-10	11/29/99
13	170	P-16C Powder Paint Booth	26.4 lbs/hr	Overspray Filter	PCD13	PM PM-10	11/29/99

<sup>\*</sup>The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

# 3. Fuel Burning Equipment Requirements

#### A. Limitations

1. The approved fuels for the 16.738 mmBTU/hr boiler (Ref. 06A/B) and 8.339 mmBTU/hr boiler (Ref. 07A/B) are natural gas, distillate oil and residual oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing Materials, ASTM D396-78 "Standard Specification for Fuel Oils." Residual oil is defined as fuel oil that meets the specifications for fuel oil numbers 4, 5, or 6 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in fuel may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 3 of 3/1/99 Permit)

- 1. The approved fuel for the 21.0 mmBTU/hr boiler (Ref. 01) is natural gas. A change in fuel may require a permit to modify and operate.

  (9 VAC 5-80-110)
- 2. The 16.738 mmBTU/hr boiler (Ref. 06A/B) shall consume no more than 50,000 gallons of distillate and residual oil (combined total) per year, calculated monthly as the sum of each consecutive twelve (12) month period.

  (9 VAC 5-80-110 and Condition 5 of 3/1/99 Permit)
- 3. Emissions from the operation of the 16.738 mmBTU/hr boiler (Ref. 06A/B) shall not exceed the limits specified below:

Particulate Matter	1.2 lbs/hr	0.7 tons/yr
PM-10	1.0 lbs/hr	0.6 tons/yr
Sulfur Dioxide	9.1 lbs/hr	2.0 tons/yr
Carbon Monoxide	1.4 lbs/hr	6.2 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	6.3 lbs/hr	8.3 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 80-110, 9 VAC 5-40-900, 9 VAC 5-50-260 and Condition 6 of 3/1/99 Permit)

- Particulate matter emissions from the operation of the 8.339 mmBTU/hr boiler (Ref. 07A/B) shall not exceed 0.6 pounds per million BTU input. (9 VAC 5-40-900 and 9 VAC 5-80-110)
- 5. Particulate matter emissions from the operation of the 21.0 mmBTU/hr boiler (Ref. 01) shall not exceed 0.5 pounds per million BTU input.

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(9 VAC 5-40-900 and 9 VAC 5-80-110)

6. Sulfur dioxide emissions from the operation of the 21.0 mmBTU/hr boiler (Ref. 01) shall not exceed 55.4 pounds per hour.

(9 VAC 5-40-930 and 9 VAC 5-80-110)

7. Visible emissions from the 16.738 mmBTU/hr boiler stack (91) shall not exceed ten percent (10%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent (20%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown, or malfunction.

(9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 7 of 3/1/99 Permit)

8. Visible emissions from the 8.339 mmBTU/hr boiler stack (88) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown, or malfunction.

(9 VAC 5-50-80 and 9 VAC 5-80-110)

9. Visible emissions from the 21.0 mmBTU/hr boiler stack (92) shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty percent (60%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown, or malfunction.

(9 VAC 5-40-940 and 9 VAC 5-80-110)

10. The maximum sulfur content of the oil (distillate and residual) to be burned in the 16.738 mmBTU/hr (Ref. 06A/B) and 8.339 mmBTU/hr (Ref. 07A/B) boilers shall not exceed 0.5 percent by weight per shipment.

(9 VAC 5-80-110 and Condition 8 of 3/1/99 Permit)

11. Emissions from each boiler (Ref. 01, 06A/B, 07A/B) shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boilers. These procedures shall be based on the manufacturer's recommendations, at minimum.

(9 VAC 5-80-110 and Condition 9 of 3/1/99 Permit)

# B. Monitoring and Recordkeeping

 The permittee shall obtain a certification from the fuel supplier with each shipment of oil to be burned in the 16.738 mmBTU/hr boiler (Ref. 06A/B) and 8.339 mmBTU/hr boiler (Ref. 07A/B). Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier,
- b. The date on which the oil was received.
  - c. The volume of oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1, 2, 4, 5, or 6, and
  - e. The sulfur content (in percent) of the oil.

(9 VAC 5-80-110 and Condition 8 of 3/1/99 Permit)

- 2 The permittee shall perform periodic monitoring of the boiler stacks (88, 91) as follows:
  - a Conduct weekly inspections to determine the presence of visible emissions when burning residual or distillate oil. If during the inspection, visible emissions are observed, an EPA Method 9 (40 CFR 60, Appendix A) visible emission evaluation (VEE) shall be conducted. The VEE shall be conducted for a minimum period of six (6) minutes. If any of the observations exceed the applicable opacity limit, the observation period shall continue until sixty (60) minutes of observation has been completed.
  - If the results of any VEE exceed the applicable standard in Conditions III.A.8 or III.A.9, a performance test shall be conducted for particulate matter (PM) on the boiler stack which exceeded the standard using EPA Method 5 (40 CFR Part 60, Appendix A). The tests shall be performed, and demonstrate compliance with the applicable standard within 90 days of the exceedance of the opacity standard or within one calendar year of the previous stack test of that boiler whichever occurs later. The details of the test are to be arranged with the Director, Valley Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Regional Office, within 45 days after test completion and shall conform to the test report format enclosed in this permit.

(9 VAC 5-80-110)

When a performance test is required by Condition III.B.2.b, a concurrent VEE shall be conducted in accordance with 40 CFR, Part 60, Appendix A, Method 9 by the permittee on the stack being tested. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Valley Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Should conditions prevent concurrent opacity observations, the Director, Valley Regional Office, shall be notified in writing, within seven days, and visible emissions testing is to be rescheduled within 30 days. Rescheduled testing is to be conducted under the same conditions (as possible) as the performance tests. Two copies of the test results shall be

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submitted to the Director, Valley Regional Office, within 45 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110)

- 4 The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:
  - a. The monthly and annual throughput of natural gas (in million cubic feet) and oil (distillate and residual)(in 1000 gallons) to each boiler (Ref. 01, 06A/B, 07A/B). Annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
  - b. All fuel supplier certifications.
  - c. A log of weekly inspections and the results of all VEEs performed on each boiler stack as required in Condition III.B.2.
  - d. The DEQ approved, pollutant-specific emission factors and the equations used to demonstrate compliance with Conditions III.A.4, III.A.5, III.A.6 and III.A.7.
  - e. Monthly and annual VOC emissions from fuel burning equipment (Ref. 01, 06A/B, 07A/B). Emissions shall be calculated using the DEQ approved, pollutant-specific emission factors and the equations used to calculate VOC emissions from boiler operations.
  - f. Records of the required boiler operator training including a statement of time, place and nature of training provided.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Conditions 9 and 10 of 3/1/99 Permit)

## C. Testing

- 1. The 16.738 mmBTU/hr boiler (Ref. 06A/B) shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.
  - (9 VAC 5-80-110 and Condition 4 of 3/1/99 Permit)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved

# by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
voc	EPA Methods 18, 25, 25a
NO <sub>x</sub>	EPA Method 7
SO <sub>2</sub>	EPA Method 6
со	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

# 4. Coating Equipment Requirements

#### A. Limitations

1. The approved fuel for the 1.5 mmBTU/hr cure oven used in conjunction with the P-16 powder paint line (Ref. 5B) is natural gas. A change in fuel may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 3 of 11/29/99 Permit)

- 2. Particulate emissions from each of the following paint booths shall be controlled by overspray filters:
  - P-16B and P-16C of the existing P-16 line (Ref. 5A)
  - F-27OF paint booth (Ref. 8)
  - F-27 paint booth (Ref.9)
  - P-31 paint booth (Ref. 10)
  - P-16B powder paint booth (Ref. 12)
  - P-16C powder paint booth (Ref. 13)

(9 VAC 5-80-110 and Condition 4 of 11/29/99 Permit)

3. Particulate emissions from the P-16D and P-16E paint booths of the existing P-16 paint line (Ref. 5A) shall be controlled by water curtains.

(9 VAC 5-80-110 and Condition 5 of 11/29/99 Permit)

- 4. Particulate emissions from the P-16 powder paint line (Ref. 5B) shall be controlled by a primary and secondary air filtration system using filters composed of cellulose fibers. (9 VAC 5-80-110 and Condition 6 of 11/29/99 Permit)
- 5. VOC emissions from the F-27OF (Ref. 8) paint booth are limited to 2.8 lbs of VOC per gallon of coating (less water) calculated as a monthly average.

(9 VAC 5-80-110 and Condition 7 of 11/29/99 Permit)

6. The existing P-16 paint line (Ref. 5A), consisting of 4 individual paint booths (P-16B through P-16E), shall be replaced with the P-16 powder paint line (Ref. 5B) and the P-16B (Ref. 12) and P-16C (Ref. 13) powder paint booths. Reactivation of this paint line (Ref. 5A) may require a permit. (9 VAC 5-80-110 and Condition 9 of 11/29/99 Permit)

7. VOC emissions shall not exceed the limit specified below:

F-27OF Paint Booth (Ref. 8)

18.0 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 11 of 11/29/99 Permit)

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8. Visible emissions from each paint booth exhaust (111, 112, 113, 114, 167, 168, 169, 170, 123, 29) shall not exceed five (5) percent opacity as determined by EPA Method 9 (Reference 40 CFR 60, Appendix A).

(9 VAC 5-80-110, 9 VAC 5-50-80 and Condition 15 of 11/29/99 Permit)

- 9. In order to minimize the duration and frequency of excess emissions due to malfunctions of air pollution control equipment, the permittee shall:
  - 1. Develop a maintenance schedule and maintain records of all scheduled and nonscheduled maintenance to air pollution control equipment.
  - 2. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.
  - (9 VAC 5-80-110 and Condition 21 of 11/29/99 Permit)
- 10. The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of training provided including names of trainees, date of training and nature of training.
  - (9 VAC 5-80-110 and Condition 22 of 11/29/99 Permit)
- 11. The approval to modify the following processes shall become invalid if modification is not commenced by February 28, 2002, or if it is discontinued for a period of eighteen (18) months. Modification of the facility includes the following:
  - a. The modification of the existing F-27OF paint booth (Ref. 8)
  - b. The installation of the P-16B (Ref. 12) and P-16C (Ref. 13) powder paint booths
  - c. The installation of the P-16 powder paint line equipped with a 1.5 MMBtu per hour natural gas cure oven (Ref. 5B)

(9 VAC 5-80-110 and Condition 23 of 11/29/99 Permit)

#### B. Monitoring and Recordkeeping

- Each overspray filter (PCD05AB, PCD05AC, PCD08, PCD09, PCD10, PCD12, PCD13) shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. Each device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
  - (9 VAC 5-80-110 and Condition 4 of 11/29/99 Permit)
- 12. The primary air filtration system (PCD05B) used in conjunction with the P-16 powder paint line (Ref. 5B) shall be equipped with a device to continuously measure the

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differential pressure drop across the filters. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.

(9 VAC 5-80-110 and Condition 6 of 11/29/99 Permit)

2. Each water curtain (PCD05AD, PCD05AE) shall be inspected daily to ensure that the flow of water covers the entire width and height of the spray booth exhaust and the depth of the water spray is uniform across the entire width of the paint booth exhaust.

(9 VAC 5-80-110 and Condition 5 of 11/29/99 Permit)

- 13. The permittee shall perform daily inspections of each paint booth and its associated exhaust. Each inspection shall include:
  - a an observation of the presence of visible emissions (111, 112, 113, 114, 167, 168, 169, 170, 123, 29).
  - b a check of correct filter placement and filter condition (PCD05AB, PCD05AC, PCD08, PCD09, PCD10, PCD12, PCD13, PCD05B)
  - c the pressure drop across each overspray filter (PCD05AB, PCD05AC, PCD08, PCD09, PCD10, PCD12, PCD13).
  - d the pressure drop across the filters of the primary air filtration system (PCD05B).
  - e a check of each water curtain (PCD05AD, PCD05AE) to ensure that the flow of water covers the entire width and height of the spray booth exhaust and the depth of the water spray is uniform across the entire width of the paint booth exhaust.

The presence of visible emissions from any paint booth stack shall require further investigation as to the cause of the visible emissions. Timely corrective action shall be taken such that the pollution control device resumes operation and there are no visible emissions from the paint booth stack. All observations and corrective actions taken shall be recorded.

(9 VAC 5-80-110)

14. The monthly average VOC content of all coatings, thinners and cleaning solutions

$$VOC_{avg} = \sum_{i=1}^{n} (T_{mat}VOC_{mat})/T_{total}$$

used in the F-27OF (Ref. 8) paint booth shall be calculated using the following equation: Where:

VOC<sub>avg</sub> = the monthly average VOC content in pounds per gallon

 $T_{mat}$  = the throughput in gallons of each coating, thinner and cleaning solution

(i) during the calendar month

VOC<sub>mat</sub> = the density of VOC, in pounds per gallon, contained in each coating,

thinner and cleaning solution (i)

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T<sub>total</sub> = the total throughput in gallons of all coatings, thinners and cleaning solutions

(9 VAC 5-80-110)

15. Except as indicated in Condition IV.B.7., for the purpose of calculating the monthly average VOC content of all coatings, thinners and cleaning solutions used in the F-27OF (Ref. 8) paint booth, the VOC content of each coating, thinner and cleaning solution as supplied shall be based on formulation data as shown on its Material Safety Data Sheet (MSDS) or other vendor information. If VOC content is given as a range, the maximum value shall be used.

(9 VAC 5-80-110)

- 16. If the monthly calculation (as required by Condition IV.B.5.) indicates that the monthly average VOC content of all coatings, thinners and cleaning solutions used in the F-27OF (Ref. 8) paint booth are greater than 50% of the allowable limit in Condition IV.A.5., the VOC content of each coating, thinner and cleaning solution as supplied shall be determined annually using Reference Method 24 or 24A (40 CFR 60, Appendix A) and such content shall be used for the purpose of calculating emissions. Each coating, thinner or cleaning solution whose MSDS indicates a VOC content of 100% by weight shall be assumed to be 100% VOC for the purpose of calculating emissions, and does not require Reference Method 24 or 24A (40 CFR 60, Appendix A) testing. An initial test shall be conducted, by the permittee or the supplier, for each product formulation within 90 days of the effective date of this permit. Each new product formulation received after the effective date of this permit shall be tested within 90 days of the receipt of shipment. Each coating, thinner and cleaning solution shipment received shall be clearly identified by a product formulation number which may be correlated to Method 24 or 24A test results. Annual testing may be discontinued after actual annual emissions are below 50% of the allowable limit in Condition IV.A.5. for twelve (12) consecutive months. (9 VAC 5-80-110)
- 17. The permittee shall determine compliance with the VOC emission limit established in

$$E_{voc} = \sum_{i=1}^{n} T_{mat} VOC_{mat} / 2000$$

Condition IV.A.7. by calculating the monthly emissions using the following equation: Where:

 $E_{voc}$  = the total monthly VOC emissions, in tons

 $T_{mat}$  = the throughput, in gallons, of each coating, thinner and cleaning solution

(i) during the calendar month

VOC<sub>mat</sub> = the density of VOC, in pounds per gallon, contained in each coating,

thinner and cleaning solution (i)

Annual VOC emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110)

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18. Except as indicated in Condition IV.B.10., for the purpose of calculating emissions from the F-27OF paint booth (Ref. 8), the VOC content of each coating, thinner and cleaning solution as supplied shall be based on formulation data as shown on its Material Safety Data Sheet (MSDS) or other vendor information. If VOC content is given as a range, the maximum value shall be used. (9 VAC 5-80-110)

- 19. If the monthly calculation (as required by Condition IV.B.8.) indicates that annual VOC emissions from the F-27OF paint booth (Ref. 8) are greater than 50% of the allowable limit in Condition IV.A.7., the VOC content of each coating, thinner and cleaning solution as supplied shall be determined quarterly using Reference Method 24 or 24A (40 CFR 60, Appendix A) and such content shall be used for the purpose of calculating emissions. Each coating, thinner or cleaning solution whose MSDS indicates a VOC content of 100% by weight shall be assumed to be 100% VOC for the purpose of calculating emissions, and does not require Reference Method 24 or 24A (40 CFR 60, Appendix A) testing. Testing shall be conducted, by the permittee or the supplier, for each product formulation received after such emissions level is determined. Each coating, thinner and cleaning solution shipment received shall be clearly identified by a product formulation number which may be correlated to Method 24 or 24A test results. Quarterly testing may be discontinued after actual annual emissions are below 50% of the allowable limit in Condition IV.A.7. for three consecutive months.

  (9 VAC 5-80-110)
- 20. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:
  - a. Material Safety Data Sheets (MSDS) and product formulation data including: total and individual mass VOC content, in %, as applicable, for each coating, thinner and cleaning solution used in the F-27OF paint booth (Ref. 8).
  - b. Monthly and annual throughput (in gallons) of each coating, thinner and cleaning solution used in the F-27OF paint booth (Ref. 8). Annual throughputs shall be calculated as the sum of each consecutive twelve (12) month period.
  - c. Monthly and annual throughput (in pounds) of each coating used in each paint booth and paint line (Ref. 5B, 12, 13). Annual throughputs shall be calculated as the sum of each consecutive twelve (12) month period.
  - d. Monthly average VOC content of all coatings, thinners and cleaning solutions applied in the F-27OF (Ref. 8) paint booth.
  - e. Monthly and annual VOC emissions (in pounds) for the F-27OF paint booth (Ref.
    8). Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.
  - f. All fuel supplier records for the 1.5 mmBtu/hr cure oven used in conjunction with the P-16 powder paint line (Ref. 5B).
  - g. Daily paint booth inspection results including:

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- 1) The date, time, and name of person performing each inspection;
- 2) The pressure drop across each overspray filter (PCD05AB, PCD05AC, PCD08, PCD09, PCD10, PCD12, PCD13);
- 3) The pressure drop across the filters of the primary air filtration system (PCD05B);
- 4) A check of each water curtain (PCD05AD, PCD05AE) to ensure that the flow of water covers the entire width and height of the spray booth exhaust and the depth of the water spray is uniform across the entire width of the paint booth exhaust;
- 5) Whether or not there were visible emissions observed; and
- 6) Any maintenance or repairs performed as a result of these inspections.
- h. Records of any reference method testing that is performed under Conditions IV.B.7. and IV.B.10.
- I. Records of all scheduled and non-scheduled maintenance to air pollution control equipment as required by Condition IV.A.9.
- j. Records of air pollution control equipment training as required by Condition IV.A.10.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110 and Condition 17 of 11/29/99 Permit)

## C. Testing

- 1. The following paint booths shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods:
  - P-16B, P-16C, P-16D and P-16E of the existing P-16 paint line (Ref. 5A)
  - P-16 powder paint line (Ref. 5B)
  - F-27OF paint booth (Ref. 8)
  - F-27 paint booth (Ref.9)
  - P-31 paint booth (Ref. 10)
  - P-16B powder paint booth (Ref. 12)
  - P-16C powder paint booth (Ref. 13)

Test ports shall be provided at the appropriate locations. (9 VAC 5-80-110 and Condition 10 of the 11/29/99 Permit)

21. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method
VOC Content	EPA Methods 24, 24A (40 CFR 60, Appendix A)
HAP Content	EPA Method 311 (40 CFR 63, Appendix A)
PM/PM-10	EPA Methods 5, 17 (40 CFR 60, Appendix A)
Visible Emission	EPA Method 9 (40 CFR 60, Appendix A)

(9 VAC 5-80-110)

# D. Reporting

The permittee shall furnish written notification to the Director, Valley Regional Office, of:

- The actual dates on which installation of the P-16B (Ref. 12), P-16C (Ref. 13) powder paint booths and P-16 powder paint line (Ref. 5B) commenced within thirty (30) days after such date.
- 2. The actual dates on which startup of the P-16B (Ref. 12), P-16C (Ref. 13) powder paint booths and P-16 powder paint line (Ref. 5B) commenced within thirty (30) days after such date.
- 3. The actual date on which replacement of the existing P-16 paint line (Ref. 5A), consisting of 4 individual paint booths (P-16B through P-16E), is completed within thirty (30) days after such date.

(9 VAC 5-80-110 and Condition 16 of the 11/29/99 Permit)

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#### 5. Facility Wide Conditions

The facility-wide terms and conditions shall apply to all emission units listed in Section II of this permit.

(9 VAC 5-80-110)

#### A. Limitations

1. The total emissions from the facility prior to the commencement of operation of the P-16 powder paint line ( Ref. 5B) shall not exceed the limits specified below:

Volatile Organic Compounds

210.0 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110 and Condition 13 of the 11/29/99 Permit)

2. Beginning with the commencement of operation of the P-16 powder paint line (Ref. 5B), emissions from the facility shall not exceed the limits specified below:

Volatile Organic Compounds

155.0 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110 and Condition 14 of 11/29/99 Permit)

# B. Monitoring and Recordkeeping

1. Actual monthly VOC emissions shall be calculated using the following formula:

$$E_{VOC} = E_{COATING} + E_{FUEL}$$

Where:

 $E_{VOC}$  = Total VOC emissions from the facility expressed as tons per calendar

month

 $E_{COATING}$  = Total VOC emissions from coating operations (Ref. 5A, 8, 9, 10)

expressed as tons per calendar month

E<sub>FUEL</sub> = Total VOC emissions from fuel burning equipment (Ref. 01, 06A/B,

07A/B) expressed as tons per calendar month

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2. The permittee shall determine compliance with the VOC emission limits established in Conditions V.A.1. and V.A.2. by calculating the monthly emissions from the P-16 paint line (Ref. 5A), F-27OF paint booth (Ref. 8), F-27 paint booth (Ref. 9), and P-31 paint

$$E_{voc} = \sum_{i=1}^{n} T_{mat} VOC_{mat}$$

booth (Ref. 10) using the following equation:

Where:

 $E_{voc}$  = the total monthly VOC emissions, in tons

 $T_{mat}$  = the throughput in gallons, of each coating, thinner and cleaning solution

(I) during the calendar month

 $VOC_{mat}$  = the density of VOC, in pounds per gallon, contained in each coating,

thinner and cleaning solution (I)

Annual VOC emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

- Except as indicated in Condition V.B.4., for the purpose of calculating emissions, the VOC content of each coating, thinner and cleaning solution as supplied shall be based on formulation data as shown on its Material Safety Data Sheet (MSDS) or other vendor information. If VOC content is given as a range, the maximum value shall be used. (9 VAC 5-80-110)
- 4. If the monthly calculation (as required by Condition V.B.1.) indicates that annual VOC emissions are greater than 50% of the applicable allowable limit in Condition V.A.1. or V.A.2., the VOC content of each coating, thinner and cleaning solution, as supplied, for all paint booths (Ref. 5A, 8, 9, 10) shall be determined quarterly using Reference Method 24 or 24A (40 CFR 60, Appendix A) and such content shall be used for the purpose of calculating emissions. Each coating, thinner or cleaning solution whose MSDS indicates a VOC content of 100% by weight shall be assumed to be 100% VOC for the purpose of calculating emissions, and does not require Reference Method 24 or 24A (40 CFR 60, Appendix A) testing. Testing shall be conducted, by the permittee or the supplier, for each product formulation received after such emissions level is determined. Each coating, thinner and cleaning solution shipment received shall be clearly identified by a product formulation number which may be correlated to Method 24 or 24A test results. Quarterly testing may be discontinued after actual annual emissions are below 50% of the applicable allowable limit in Condition V.A.1. or V.A.2. for three consecutive months. (9 VAC 5-80-110)
- 5. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Regional Office. These

records shall include, but are not limited to:

- a. Monthly and annual facility-wide VOC emissions (in pounds). Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- b. Monthly and annual VOC emissions from fuel burning equipment (Ref. 01, 06A/B, 07A/B) shall be determined through monitoring and recordkeeping requirements contained in Section III.B. of this permit.
- c. Monthly and annual VOC emissions from the F-27OF paint booth (Ref. 8) shall be determined through monitoring and recordkeeping requirements contained in Section IV.B. of this permit.
- d. Monthly and annual VOC emissions from the P-16 paint line (Ref. 5A), F-27 paint booth (Ref. 9), and P-31 paint booth (Ref. 10) shall be determined through the following monitoring and recordkeeping requirements:
  - (1) Material Safety Data Sheets (MSDS) and product formulation data including: total and individual mass VOC content, in %, as applicable, for each coating, thinner and cleaning solution.
  - (2) Monthly and annual throughput (in gallons) of each coating, thinner and cleaning solution. Annual throughputs shall be calculated as the sum of each consecutive twelve (12) month period.
  - (3) Monthly and annual VOC emissions (in pounds). Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- e. Records of any reference method testing that is performed under Condition V.B.4.

(9 VAC 5-80-110, Condition 17 of 11/29/99 Permit)

## C. Testing

 If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method
VOC Content	EPA Methods 24, 24A (40 CFR 60, Appendix A)

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#### 6. General Facility Requirements

#### A. Limitations

1. The permittee is limited to use of the following volatile toxic compounds in its coatings for the F-27OF (Ref. 8) paint booth:

Volatile Toxic Compounds	CAS Number
Ethylene Glycol Monobutyl Ether	111-76-2
Ethylene Glycol Monopropyl Ether	2807-30-9
Ethylene Glycol	107-21-1
Methanol	67-56-1

(9 VAC 5-80-110 and Condition 8 of 11/29/99 Permit)

- The permittee may use additional toxic compounds (listed in Attachment A) in the F-27OF paint booth under 9 VAC 5-50-160 D of State Regulations without obtaining a new permit provided the following conditions are met:
  - b. The permittee shall operate this facility in compliance with Rule 5-3 of State Regulations for all toxic compounds.
  - c. Use of any toxic compound subject to federal regulation as a hazardous air pollutant may subject the facility to additional permitting requirements in accordance with 40 CFR 61 and 40 CFR 63.
  - d. Discontinuation of previously permitted toxic compounds and the use of additional toxic compounds shall not exempt the permittee from applicable federal regulations for hazardous air pollutants under 40 CFR 61 and 40 CFR 63.
  - e. If a permit is required, failure to obtain the permit prior to the change in process formulation or the use of any additional toxic compound may result in enforcement action.

(9 VAC 5-80-110 and Condition 8 of 11/29/99 Permit)

3. VOC emissions of ethylene glycol monobutyl ether (CAS #111-76-2) shall not exceed the limits specified below:

F-27OF Paint Booth

(Ref. 8) 12.2 lbs/hr 11.6 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110, 9 VAC 5-50-260 and Condition 12 of 11/29/99 Permit)

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# B. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:

- Material Safety Data Sheets (MSDS) or other vendor information showing the toxic compound content for each coating, thinner and cleaning solution used in the F-27OF (Ref. 8) paint booth.
- 2. Monthly and annual throughput (in gallons) of each coating, thinner and cleaning solution used in the F-27OF (Ref. 8) paint booth. Annual throughputs shall be calculated as the sum of each consecutive twelve (12) month period.
- 3. Average hourly emissions of ethylene glycol monobutyl ether (in pounds) for the F-27OF (Ref. 8) paint booth. Average hourly emissions shall be calculated on a monthly basis.
- 4. Monthly and annual emissions (in pounds) of each compound (listed in Attachment A) used in the F-27OF (Ref. 8) paint booth. Annual emissions shall be calculated monthly as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110 and Condition 17 of 11/29/99 Permit)

## C. Reporting

The permittee may use additional toxic compounds (listed in Attachment A) in the F-27OF paint booth under 9 VAC 5-50-160 D of State Regulations without obtaining a new permit provided that notification is given to the Department (Director, Valley Regional Office). Such notification shall be made within fifteen (15) days after the use of additional toxic compounds and shall include identification of the toxic compound, the date the toxic compound was first used, and the anticipated maximum throughput of that compound in lbs/hr and tons/yr. Additional details of the notification should be arranged with the Director, Valley Regional Office.

(9 VAC 5-80-110 and Condition 8 of 11/29/99 Permit)

# 7. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
03	Five (5) Natural Gas- Fired Space Heaters	9 VAC 5-80-720 A	-	-
14	Welding & Brazing	9 VAC 5-80-720 B	PM/PM-10, Cr, Co, Mn, Ni, CO, SO <sub>2</sub> , NO <sub>X</sub> , VOC	-
15	Shot Blasting	9 VAC 5-80-720 B	PM/PM-10	-
16	Fuel Oil Storage Tanks (3@6,000 gallons)	9 VAC 5-80-720 B	VOC	-
17	Metal Fabrication	9 VAC 5-80-720 B	PM/PM-10, Cr, Co, Mn, Ni	-
18	Hot Water Baths	9 VAC 5-80-720 B	PM/PM-10, CO, SO <sub>2</sub> , NO <sub>X</sub> , VOC	-
19	Water Cooling Towers	9 VAC 5-80-720 A	-	-
20	Adhesive Usage	9 VAC 5-80-720 B	VOC	-

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

#### 8. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of applicability
None Identified	-	-

Nothing in this permit shield shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to § 114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

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#### 9. General Conditions

# A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

## **B.** Permit Expiration

This permit shall become invalid five years from the date of issuance. The permittee shall submit an application for renewal of this permit no earlier than 18 months and no later than six months prior to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the DEQ on the renewal application.

(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)

## C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

5. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

6. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G,

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## and shall include:

- 1. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- f. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
  - (1) exceedance of emissions limitations or operational restrictions;
  - (2) excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or
  - (3) failure to meet monitoring, record-keeping, or reporting requirements contained in this permit.

(9 VAC 5-80-110 F)

# D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than <u>March 1</u> each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to § 114(a)(3) and § 504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the

source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U.S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

# E. Permit Deviation Reporting

The permittee shall notify the Director, Valley Regional Office, within four daytime business hours of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the occurrence, the permittee shall provide a written statement explaining the problem, any corrective actions or preventive measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

# F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Director, Valley Regional Office, within four (4) daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown.

(9 VAC 5-80-250)

# G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

## H. Duty to Comply

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The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

## I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

## J. Permit Action for Cause

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(9 VAC 5-80-110 G.4)

- 2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
  - Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is the potential of, a resulting emissions increase;
  - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
  - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emission cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
  - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
  - e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
  - f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9)

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VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);

g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and by 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

# K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

# L. Duty to Submit Information

- 1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- 7. Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

## M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

## N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of

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existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

- 2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling
  of dusty material. Adequate containment methods shall be employed during
  sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
- 5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

# O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (9 VAC 5-50-20)

## P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 1. (9 VAC 5-80-110 J)

## Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

# R. Reopening For Cause

The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

# S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

#### T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)

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2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

#### U. Malfunction as an Affirmative Defense

- A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
- The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. For malfunctions that occurred for one hour or more, the permittee submitted to the board by the deadlines described in **Failure/Malfunction Reporting** above, a notice and written statement containing a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements.
- In any enforcement proceeding, the permittee seeking to establish the occurrence of a
  malfunction shall have the burden of proof. The provisions of this section are in
  addition to any malfunction, emergency or upset provision contained in any
  requirement applicable to the source.

(9 VAC 5-80-250)

#### V. Permit Revocation or Termination for Cause

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A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The board may suspend, under such conditions and for such period of time as the board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-260)

# W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

# X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82. Subparts A to F.

(40 CFR Part 82, Subparts A - F)

#### Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

# Z. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

## **AA. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110 except subsection N shall be included to determine compliance.

- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.